CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)	Docket No.
Applicant(s): J.J. GARCIA-LUNA-ACEVES; CHRISTINA PARSA	UC2000-353-2

Serial No. 10/021,318	Filing Date OCTOBER 29, 2001	Examiner	Group Art Unit 2681

Invention: METHOD FOR IMPROVING TCP PERFORMANCE OVER WIRELESS LINKS

APR 2 5 2002

I hereby certify that the following correspondence:

Information Disclosure Citation (PTO-1449) (Page 1 thru 3)

(Identify type of correspondence)

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under

37 CFR 1.10 in an envelope addressed to: The Assistant Commissioner for Patents, Washington, D.C. 20231 on

<u>April 25, 2002</u>
(Date)

<u>Jerry V. King</u>
(Typed or Printed Name of Person Mailing Correspondence)

(Signature of Person Mailing Correspondence)

EL737163505US
("Express Mail" Mailing Label Number)

Note: Each paper must have its own certificate of mailing.

CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)	Docket No.
Applicant(s): J.J. GARCIA-LUNA-ACEVES; CHRISTINA PARSA	UC2000-353-2

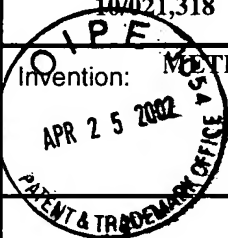| Serial No. 10/021,318	Filing Date OCTOBER 29, 2001	Examiner	Group Art Unit 2681

Invention: METHOD FOR IMPROVING TCP PERFORMANCE OVER WIRELESS LINKS

I hereby certify that the following correspondence:

Citations (26)

(Identify type of correspondence)

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under

37 CFR 1.10 in an envelope addressed to: The Assistant Commissioner for Patents, Washington, D.C. 20231 on

_____**April 25, 2002**_____
(Date)

_____**Jerry V. King**_____
(Typed or Printed Name of Person Mailing Correspondence)

_____
(Signature of Person Mailing Correspondence)

EL737163505US
("Express Mail" Mailing Label Number)

Note: Each paper must have its own certificate of mailing.

	INFORMATION DISCLOSURE CITATION *(Use several sheets if necessary)*	Docket Number (Optional) UC2000-353-2	Application Number 10/021,318 #5
		Applicant(s) J.J. GARCIA-LUNA-ACEVES; CHRISTINA PARSA	
		Filing Date OCTOBER 29, 2001	Group Art Unit

*EXAMINER INITIAL

*EXAMINER INITIAL	OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*
	Bacce, A. and Badrinath, B.R., "I-TCP: INDIRECT TCP FOR MOBILE HOSTS," In Proceedings of 15th IEEE International Conference on Distributed Computing Systems, pp. 136-143, Vancouver, British Columbia, Canada, May, 1995.
	Balakrishnan, H. et al., "A COMPARISON OF MECHANISMS FOR IMPROVING TCP PERFORMANCE OVER WIRELESS LINKS," IEEE/ACM Transactions on Networking, Vol. 6, No. 5; December, 1997.
	Balakrishnan, H. et al., "IMPROVING RELIABLE TRANSPORT AND HANDOFF PERFORMANCE IN CELLULAR WIRELESS NETWORKS," ACM Wireless Networks Journal, Vol. 1, No. 4, pp. 1 thru 19, December, 1995.
	Brakmo, L.S. et al., "TCP VEGAS: NEW TECHNIQUES FOR CONGESTION DETECTION AND AVOIDANCE," In Proceedings SIGCOMM '94, pp. 1 thru 12, London, United Kingdom, Aug/Sept, 1994.
	Brown, Kevin and Singh, Suresh, "M-TCP: TCP FOR MOBILE CELLULAR NETWORKS," Computer Communication Review, Vol. 27, No. 5, pp. 19-43, October, 1997.
	Caceres, R. and Iftode, L., "IMPROVING THE PERFORMANCE OF RELIABLE TRANSPORT PROTOCOLS IN MOBILE COMPUTING ENVIRONMENTS," IEEE Journal on Selected Areas in Communication, Vol. 13, No. 5, pp. 1 thru 17, 1995.
	Chaskar, H. et al., "ON THE DESIGN OF INTERFACES FOR TCP/IP OVER WIRELESS," In MILCOM '96 Conference Proceedings, Vol. 1, No. 3, pp. 199-203, October, 1996.
	Clark, D.D. et al., "NETBLT: A HIGH THROUGHPUT TRANSFER PROTOCOL," In Proceedings SIGCMM, pp. 353-359, Stowe, Vermont, August, 1987.
	Cobb, J. and Agrawal, P., "CONGESTION OR CORRUPTION? A STRATEGY FOR EFFICIENT WIRELESS TCP SESSIONS," In Proceedings IEEE Symposium on Computers and Communications, pp. 1 thru 6, June, 1996.
	Fall, Kevin and Floyd, Sally, "SIMULATION-BASED COMPARISONS OF TAHOE, RENO, AND SACK TCP," Computer Communications Review, Vol. 26, No. 3, pp. 5-21, July, 1996.
	Floyd, S. and Jacobson, V., "RANDOM EARLY DETECTION GATEWAYS FOR CONGESTION AVOIDANCE," IEEE/ACM Transactions on Networking, Vol. 4, No. 1, pp. 397-413, August, 1993.
	Jacobson, R. et al., "TCP EXTENSIONS FOR HIGH PERFORMANCE," Technical Report, Technical Report No. 1185, pp. 1 thru 37, May, 1992.

EXAMINER	DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

P09B/REV04

SHEET 1 OF 3

*EXAMINER INITIAL	OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*
	Jacobson, V. and Floyd, S., "TCP AND EXPLICIT CONGESTION NOTIFICATION," Computer Communication Review, Vol. 24, No. 5, pp. 8 thru 23, October, 1994.
	Karn, P. and Partridge, C., "IMPROVING ROUND-TRIP TIME ESTIMATES IN RELIABLE TRANSPORT PROTOCOLS," Computer Communication Review, Vol. 17, No. 5, pp. 2 thru 7, August, 1987.
	Keshav, S., "PACKET-PAIR FLOW CONTROL," pp. 1 thru 45, http://www.cs.cornell.edu/skeshav/papers.html.
	Lakshman, T.V. et al., "WINDOW-BASED ERROR RECOVERY AND FLOW CONTROL WITH A SLOW ACKNOWLEDGEMENT CHANNEL: A STUDY OF TCP/IP PERFORMANCE," In Proceedings IEEE INFOCOM '97, No. 3, pp. 1199 thru 1209, April, 1997.
	Lin, D. and Kung, H.T., "TCP FAST RECOVER STRATEGIES: ANALYSIS AND IMPROVEMENTS," In Proceedings IEEE INFOCOM '98, pp. 1 thru 9, April, 1998.
	Kalampoukas, L. et al., "EXPLICIT WINDOW ADAPTATION: A METHOD TO ENHANCE TCP PERFORMANCE," In Proceedings IEEE INFOCOM '98, pp. 242-251, April, 1998. [Published at University of California-Santa Cruz on August 21, 1997.
	Mathis, M. et al., "TCP SELECTIVE ACKNOWLEDGE OPTIONS," Technical Report, Technical Report RFC 2018, pp. 1 thru 12, October, 1996.
	Samaraweera, N.K.G., "NON-CONGESTION PACKET LOSS DETECTION FOR TCP ERROR RECOVERY USING WIRELESS LINKS," IEEE Proceedings-Communications, Vol. 146, pp. 222-230, August, 1999.
	Parsa, C. et al., "IMPROVING TCP PERFORMANCE OVER WIRELESS NETWORKS AT THE LINK LAYER," ACM Mobile Networks and Applications, Vol. 5, No. 1, pp. 1 thru 25, March, 2000.
	Postel, J.B., "TRANSMISSION CONTROL PROTOCOL," Technical Report, Information Sciences Institute, Cover + i thru iii + pp. 1 thru 85, RFC 793, September, 1981.
	Waldby, J. et al., "TOTAL ACKNOWLEGEMENTS: A ROBUST FEEDBACK MECHANISM FOR END-TO-END CONGESTION CONTROL," Sigmetrics '98, Performance Evaluation Review, vol. 26, pp. 1 thru 23, 1998.
	Wang, Z. et al., "ELIMINATING PERIODIC PACKET LOSSES IN THE 4.3 TAHOE BSD TCP CONGESTION CONTROL ALGORITHM," Computer Communication Review, Vol. 22, No. 2, pp. 9 thru 16, April, 1992.

EXAMINER	DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

P09B/REV04

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

APR 2 5 2002

*EXAMINER INITIAL	OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*
	Wang, Z. et al., "A NEW CONGESTION CONTROL SCHEME: SLOW START AND SEARCH," Computer Communication Review, Vol. 21, No. 1, pp. 32 thru 43, January, 1991.
	Parsa, C.; J.J. Garcia-Luna-Aceves; "IMPROVING TCP CONGESTION CONTROL OVER INTERNETS WITH HETEROGENEOUS TRANSMISSION MEDIA," Proceedings IEEE ICNP 1999, 7th International Conference on Network Protocols, Toronto, CAnada; pp. 1 thru 9, October 31 thru November 3, 1999.

EXAMINER	DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

P09B/REV04